TENT AND TRADEMARK OFFICE IN THE US

In re Application of

KOMEM et al.

09/597,461 Serial No.:

Filed: 19 June 2000

SYSTEM AND METHOD FOR

MULTIPLE CURRENCY

TRANSACTIONS

M.A. CUFF Examiner:

Commissioner of Patents and Trademarks Washington, D.C. 20231

USA

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JUN 0 4 2003

GROUP 3600

Attorney

Docket: 24393. Previously E02/1

Group Art Unit: 3627

AFFIDAVIT UNDER 37 CFR 1.132

I, Yuval Tal, am the Chief Executive Officer of E4X Ltd. at Tel Aviv, Israel. I have a first degree and a Master's degree in Engineering, which I received from Tel Aviv University, Israel My professional specialization is in the field of online commercial transactions. I have attached a copy of my curriculum vitae with some of the technical fields in which I have practical experience.

I am an inventor of the present Application. I have read the Application and the new and amended claims, as well as the Office Action from the Examiner and the accompanying references. In support of the accompanying Response to this Office Action, I have provided additional details concerning the operation of the present invention.

Briefly, the present invention relates to a system and method in which the price is guaranteed both to the buyer in the buyer's local currency, and to the seller in the seller's local currency. In order to provide such a guarantee without a loss to the buyer, the seller and/or to a third party (such as a credit card company for example), the claimed system and method of the present invention require a non-trivial implementation.

As a non-limiting example of such an implementation, I have prepared an overview of an exemplary implementation of the E4X system and method. This non-limiting example uses hedging, which is a preferred embodiment of the present invention, to guard against losses due to exchange rate fluctuations. Hedging is the process of establishing a position in a financial market, which is equal and opposite to a transaction made on an actual or physical market. The system of the present invention (E4X system) aggregates multiple physical transactions, comprising obligations for receiving payment in different local currencies, and corresponding commitments by the E4X system to exchange and remit amounts to merchants in base currencies. By taking equal and opposite future positions to the aggregated physical positions in the Interbank currency exchange market, risk of loss due to fluctuation of currency exchange rates is minimized.

To highlight the benefits of the application, I have provided descriptions of message and money flows for 3 possible scenarios which support an e-Commerce transaction between a seller and buyer operating in different currencies: (1) the transaction is conducted in the seller's currency, (2) the transaction is conducted in the buyer's currency and (3) an exemplary hedged multi-currency payment transaction performed according to the present invention. For purposes of illustration, I assume a United Kingdom (UK) based cardholder purchases and pays by credit card for goods sold at a US based e-Commerce site and that the US based merchant has a 100 USD (US dollars) ticket price for the goods sold at his site.

The first scenario is the method in most common practice. The US vendor sets up an account with his acquiring bank (bank which holds the bank account of the US vendor) to accept payments in USD. The USD 100 price tag is displayed to all buyers at his site. The UK buyer pays USD 100 with his credit card. The buyer's issuing bank (bank holding the credit card of the buyer) will receive a demand for USD 100 from the card network, the bank will convert this to GBP (Great Britain pounds sterling) and debit the buyer's current account with an amount in GBP. Upon settlement, USD 100 (less processing fees) are deposited by the

acquirer into the vendor's USD bank account. Disadvantages of this method are: (1) The buyer does not know at the time of purchase the exact amount that will be debited from his account, providing a common reason for chargeback (cancellation by buyer) of credit card transactions; (2) Currency conversion takes place several days after the transaction, increasing exposure to rate fluctuations; (3) The foreign exchange margin (typically 2-3%) on the transaction is earned by the foreign issuing bank.

For the second scenario, the US vendor needs to establish acquiring (bank) accounts in each of the currencies he wishes to support at his site. He would need to independently price his goods in each of the supported currencies: USD 100, GBP 75, EUR 96, etc.. The GBP 75 price tag is displayed to UK buyers at his site. The UK buyer pays GBP 75 with his credit card. The buyer's issuing bank will receive a demand for GBP 75 from the credit card network, with no conversion by the bank, and the buyer's current account is debited with GBP 75. On settlement, GBP 75 (less processing fees) are deposited by the acquirer into the vendor's GBP bank account. Disadvantages of this method are: (1) The merchant is exposed to currency exchange rate fluctuations; (2) Merchant needs to setup multi-currency bank accounts; (3) Merchant needs to perform multi-currency book keeping; (4) Merchant needs to manage actual exchange of funds.

The system of the present invention hedges the transaction to ensure that the US based merchant receives the full \$100 USD ticket price for the transaction. The US vendor still needs to establish processing accounts for each of the currencies he wishes to support at his site, but settlement in multiple currencies is made to bank accounts in the E4X system. The e-Commerce site requests an exchange rate table from the E4X server (server of the present invention) according to a pre-agreed schedule. The USD 100 ticket price is dynamically converted to the buyer's local currency and GBP 76 is displayed to the UK buyer. The UK buyer pays GBP with his credit card. The buyer's issuing bank will receive a demand for GBP 76 from the card network, no conversion by the bank and the buyer's current account is

debited with GBP 76, the exact price advertised for the goods at the vendor's site. On settlement, GBP 76 (less processing fees) are deposited by the acquirer into a GBP bank account managed by the E4X system. The E4X system converts the GBP to USD 100 (less processing fees), which are deposited into the vendor's USD bank account. Advantages of this method are: (1) Neither the buyer or seller are exposed to currency exchange rate fluctuations; (2) The price displayed to the buyer is the exact amount debited from his account; (3) The currency exchange is moved to the acquiring side, allowing the vendor to earn extra revenue on the exchange margin or to pass savings onto the buyer; (4) The vendor is able to avoid the accounting and administrative overheads associated with holding bank accounts in multiple currencies.

The method of the present invention preferably requires that for each payment transaction that is authorized and submitted via a credit card processor to the credit card payment process, information about the transaction, including an identifier of the rate applied and amounts in both of the buyer's and the seller's currencies, be submitted to the system of the present invention. This system reconciles purchase amounts with totals for funding reported by the processor, applying specific currency related treatment for fees, refunds, multiple captures, chargebacks and other transaction scenarios encountered in the payment flow. Settled amounts in local currency are then received, and the e-Commerce site receives a remitted base currency payment which can be reconciled with the individual USD values of each purchase at the site.

As can be seen from the above description, even guaranteeing the price for a single transaction is not simple, given the complicated operational flow. The present invention also provides other features, according to preferred embodiments including dynamic calculation and hedging of exchange rates from multiple rate sources, and definition of margins per merchant for multiple base currencies and payment types with configurable update and expiry periods. This flexibility allows the present invention to hedge a wide range of e-commerce

scenarios including subscriptions and/or other types of multiple payment scenarios, which could not possibly be handled by the background art teachings as these teachings do not provide protection against currency rate fluctuations.

The system also preferably provides transaction management, which is a preferred embodiment of the present invention. According to this embodiment, transaction infrastructure components manage the transaction life cycle of a payment from authorization to remittance, providing reconciliation and aggregation services and supporting multiple transaction types including refunds, fees and charge-backs. The server interfaces with multiple transaction sources by implementing specific drivers, which inherit functionality from core transaction services. The generic design of transaction services allows the system of the present invention to convert and hedge payments using multiple online payment methods and processing schemes, including credit/debit cards, direct debit, ACH, checks, stored value, micro-payments and others.

As the globalization of commerce increases, particularly through the Web, participants to commerce transactions are becoming increasingly aware of the need to have transparent risk-free currency conversion functionality built into payment flows. Such a requirement is emphasized in the article, "Dynamic Currency Conversion" in issue 782 of the Nilson report (attached to this Affidavit), which explains that through the late 1990's, merchants absorbed all of the risks of currency conversion. It has only been quite recently that an attempt to distribute such risks has been made. Thus, at the time of filing of the present Application, the concept of hedging risks in order to protect both the vendor and the buyer from currency exchange risks was not known, nor was calculating the price at the time of sale, such that the exact price (without currency risks) was known to both vendor and the buyer at the time of sale:

The present invention provides this capability by supplying guaranteed rates for dynamic conversion of prices, generating physical currency positions from aggregated sales

the present invention could not have been obtained from the teachings of Reeder, that billing amounts can be dynamically converted using a rate table, and those of Garber, that the foreign exchange spot market facilitates the exchange of currency between two parties. The present invention addresses the problem of currency fluctuation risk for online transactions for e-commerce, which did not exist at the time of either Reeder's or Garber's teachings. The present invention also bridges two unrelated fields of electronic commerce and foreign exchange trading. Furthermore, hedging a physical transaction before it takes place (by providing rates for dynamic conversion of displayed prices) cannot be deduced from Garber, which discusses hedging of currency transactions; such hedging by its nature occurs after the physical transaction has taken place. Furthermore, aggregation of multiple transactions to generate a combined physical position, which can then be managed for currency risk, is not taught by the existing art.

I hereby certify that the above facts and statements are true and complete, to the best of my knowledge.

Yuval Tal

Date: 5/25/63

Yuval Tal - CV

Work			
Experience:			
Position	Institution `	Business Description	Years
CEO	E4X Inc	Service for enabling	2000-2003
		multi-currency e-	
		commerce, by providing.	
3	•	guaranteeing currency	
		exchange rates to the	
	,	online point-of-sale '	
General	R-U-Sure, Ltd	Online shopping ,	98-99
Manager		cooperation services	
Manager	RADWARE Ltd	Radware solutions	97-98
		guarantee the full	
		availability and .	
*		complete security of	
		IP applications across	*
		enterprise and carrier'	
	(f)	networks.	• • •
Product Line	Lucent	Provider of multi	96-97
Manager	Technologies '	layer switching	
	(previously	products	*
· .	Lannet)		
R& D Product	Scitex	software and hardware	93-96
Manager		solution for the	•
		prepress industry	· . ·
Education:			• •
M.Sc.	Tel Aviv	Engineering with a	92-96
	University	minor in Business	
		Administration	
B.Sc	Tel Aviv	Engineering	88-92
	University		•

「エド フロックス REPORT

FOR 32 YEARS, THE LEADING PUBLICATION COVERING CONSUMER PAYMENT SYSTEMS WORLDWIDE

DYNAMIC CURRENCY CONVERSION Bank card transactions involving cardholders with accounts denominated in a currency other than the merchant's currency generated more than \$930 million in revenues from foreign exchange (FX) conversion fees for Visa and MasterCard last year. Card issuers ... (turn to page 5)

protecting web transactions firewalls are designed to stop intruders from getting into a corporate network (see issue 770), but some get through anyway. A complimentary solution that offers a higher level of security encrypts all sensitive Web activity from end to end, from remote Web browsers ... (turn to page 4)

BANKRUPTCY DEBT RECOVERY — PART 2

Bankruptcies filed by consumers and businesses in the United States last year totalled 1,577,651, of which 1,539,111 (97.6%) were personal. Those filings generated \$18.19 billion or 30% of the \$60.40 billion in total charge-offs by credit card issuers ... (turn to page 6)

WINC R NIXD RF DEPOSIT MODULE Latest enhancement for Wincor-Nixdorf ProCash ATMs lets customers deposit 50 bills or checks in one continuing transaction through a single slot, making this the only deposit model on the market that can accept this quantity of cash and/or checks at one time. (turn to page 4)

shipped 7,000 handheld wireless POS terminals in Korea. This year the company is exporting its products, including newly available wired terminals, to other countries in Asia, as well as to Latin America. Linudix terminals use Linux, a free, Unix-type (turn to page 5)

NACHA PAYMENTS 2003 The Electronic Payments Association conference will be held April 27–30 at the Orlando World Center Marriott in Orlando, Florida. Topics include: streamlining workers compensation with automated ... (turn to page 4)

Spending at the chams Wells Fargo O U.S. Bancorp JPMorganChase Bank of America MBNA O **0** Citigroup Top 10 U.S. Issuels Ranked by CapitalOne Discover 🛭 Bank One American Express \$233,00 Purchase Volume - 2002* 830E8 \$13567 \$105.06 \$167.15 \$39.43 \$73.07 \$89,40 \$48.75 \$53,05 \$75.19

SPENDING AT MERCHANTS
Both Visa and Master Card
were bigger than American
Express based on spending at
the point of sale by brand last
year, but American remained the
single largest issuer
individual issuers connected to
the bank card associations
trailed American Express even
though their figures is actuded
both Visa and Master Card
credit and debit card purchase
volume excludes cash)
Amex had no debit card
purchase volume Neither did
the other than uses 5

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CYBERSOURCE'S Version 5.0 Payment Manager software lets merchants communicate with processors via high-speed managed links at CyberSource instead of installing

their own, more costly, dedicated frame-relay connections. Tracy Wilk is VP, (650) 965-6181, twilk@cybexource.com.

and liquidates distressed consumer receivables. It currently manages more than \$1 billion in consumer debt

GENESIS FINANCIAL SOLUTIONS acquires, services

ioe.giordano@exxonmobil.com.

receivables, including credit card, medical, health club, and retail. Irving Levin is CEO, (503) 222-9960,

(1) 4145-1343, mmr@experian.fr.

EXXONMOBIL is testing its Speedpass proximity payments device using settlement through the automated dearing house, bypassing the bank card systems. Joe Giordano is VP at Speedpass, (703) 846-5885,

TRILEGIANT will offer its travel, shopping, entertainment, and consumer protection products to the 11 million clients of Columbia House, a direct marketer of music and willow of Columbia Viola is VP at Trilegiam, (203) 956-8811, wiola@trilegiam.com. Scott Handers is CEO at Columbia House, (212) 596-2928, scott_flanders@chcmail.com.

a credit card payment system to let cable subscribers pay for goods and services by swiping a credit or debit card in FORTE COMMUNICATIONS ASSOCIATES is developing

patented TV remote control. 16) 408-1447, fortcom@starstream.net.

Dan Erlin is CEO,

(302) 282-8441, hugh_bleemer@bankone.com.

73.57 FACES

BANK ONE will partner with Starbucks in the third quarter to issue a Visa credit card with a prepaid function. Hugh Beemer is EVP Co-Branding at Bank One Card Services, y acquired from Diebold, also at ExonAdobii outlets. Jack Antonimi is CEO at Cardtronics, (281) 596-9988 x1102, intensin@cardtronics.com. David Tayloris Category Mgr at ExonMobil, (703) 846-1907, david.taylor@exonmobil.com. CARDTRONICS will install ATMs at 215 ExxonMobil stations in the U.S., adding to the more than 350 it recent-

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THE PACE PASTIGES THE PACE WE HAVE TO

GLOBAL PAYMENTS will provide POS terminal management and help desk support to Union Bank of California merchants. Paul Garcia is CEO at Global, (404) 728-2413, fax (404) 728-3130. Joan Berry is SVP at UBOC. (858) 496-5554, joan.berry@uboc.com.

STORED VALUE SYSTEMS, a unit of Comdata, will supply prepaid cards and platform support to Marcus Theatres, tenth largest owner of movie theaters in the U.S. Mike Berry is EVP at SVS, (502) 420-6513,

markets. Jeff Carbiener Is SVY at x72247, jeff.carbiener@certegy.com. CERTEGY CHECK SERVICES will provide POS electronic check conversion services to all 100 Price Chopper supermarkets. Jeff Carbiener is SVP at CCS, (727) 556-9000

RDM's MICR check-imaging peripherals will be integrated with first Data Corp.'s TeleCheck Elpetronic Check Acceptance service. Douglas Nooman is CEO at RDM, [519] 746-8483 x329_dnewpdn@ndncorp.com. Steve Geiler is Dir. ECA and Terminal Product Mgmt. at TeleCheck, (713) 331-5821, steve*geiler®telecheck.com*.

PAGOBÁNCOMAT debit cardholders in Italy can now pay CEO at Intellect, 32 (2) 722-8711, jan.desmet@intellect.be. receive EMV 2000 Level 1 certification. Jan de Smet is INTELLECT'S Aega's the first mobile POS terminal to

EXPERIAN is providing credit scoring, transaction process-ing, and authentication services for cards issued in France by Egg, the on-line bank owned by Prüdential Insurance, Maguy Mercier is Dir. Mktg. & Devel. at Experian, for pdephone bills at 34,000 ATMs. Payments are borndled by Societa per i Servizi Bancari, Italy's national payment processor. Fabrizio Canedoli is Mktg. and Sales Director at SSB, 39 (02) 3484-4321. fax 39 (02) 3484-4310.

CREDITCALL COMMUNICATIONS' CardEase hardware and software for parking, vending, and ticketing machines is EMV Level 2 compatible. Nick McGarvey is Mng. Dir., 44 (117) 930-4455, nick.mcgarvey@creditcall.com. 4145-1343, mmr@experion.fr. John Schratz is Dir. Card Ops. at Egg, 44 (1332) 335-234,

DYNETICS' new Spectrascan card counter can handle clear cards and nonstandard-sized cards. Cost is \$21,500. Jeffery Hill is Director, (847) 541-7300 x102,

myFICO.COM now offers consumers FICO-scared ITansUnion Credit Profile, a FICO score from Fair, Isaac, ITansUnion. The on-line product sells fox 12.95. Sue Simon is VP at myFICO Services, (415) 49\-5593, suesimon@fuirisaac.com.

DEBITMAN, a newly aunched PIN-based point of sale network for merchant-byued debit cards, is being marketed by Fifth Third Bank Processing Solutions to its merchant by Fifth Third Bank Processing Solutions to its merchant base. John Lannan is Pres et Debitman, (307) 673-8839, john@debitman.com. Robert Sullivan is EVP at FTBPS, (513) 534-5340, mbertsullivan@X3.com.

payroll card. Steve Rueve is SVP Com'l Bq (205) 560-5213, steve neve@amsouth.com. AMSOUTH BANK is offering companies a Visa-brand payroll card. Steve Rueve is SVP Com'l banking,

CONTINENTAL AIRLINES/CHASE cardholder with co-branded World MasterCard, Visa Signature, and Visa Nats-inum cards now earn double miles for spending at selec-merchants including Best Buy, Maoy's, and Lowe's. Fay at CA, (713) 324-5605, rwagne@coair.com Evans is SVP at Chase, (212) 552-5513 Rick Wagner is Dir. Partner Mktg.

TIETOENATOR FINANCIAL SOLUTIONS will provide fraud risk-management software to Alzkraukles Banka in Latvia. Mans Ozolins is Mng. Dir. at TTS, (371) 728-6560. maris coolins@trebenatoc.com. Alvars Rauska is Dept. Head Customer Serv. at Alzkraukles Banka, (371) 777-5222,

Althasen is CEO at e-pay, 44 (1268) 242-222, polthasen@e-pay.co.uk. EURONET has spent \$76.2 million to acquire e-pay, the largest provider in the UK, and Australia of payment processing services for mobile telephone reloads and long-distance calling cards. Michael Brown is CEO at Euronet.

company also issues credit cards in partnership with Chinese Trust. Singlee Technologies will manage the accounts. Chai Chalamish is Pres. at SCB, (310) 358-0253 at ST, 86 (571) 8848-0666, huanghai@singlee.com.cn. private national credit reporting system in China. The SHAANXI CREDIT BUREAU plans to become the first scb.corp@attbi.com. Huang Hai is Mktg, and Sales Director

card payment processing system of OpenWay Systems credit and debit card account management. Andrew Vereninov is Director for Russfa and CIs at OpenWay, 7 (812) 324-4898, assertinoseopenwogranus.com. Andrei Sobolev is Dr. Banking Cards at Sberbank, Andrei Sobolev is Dr. Banking Cards at Sberbank. SBERBANK, Russia's largest savings bank, will-deployche -3772, sbcard@sbrf.ru.

jenyhines@euregy.com. Sandra Harada is VP at Banco del Progreso, (809) 563-3233 x3036, sandrah@progreso.com.do. BANCO DEL PROGRESO in the Dominican Republic now Hines is SVP at Certegy Card Serv., (727 Certegy's card-account management platform in la to process 40,000 American Express cards. Je 556-9000 x72514, Ē

processor in Germany servicing 166,000 POS terminals. Gerald Hawkins is Pres, EMEA Oper at FDC, 44 (1268) 296-965, ghawkins@fistdatacap.co.uk. Helmut Schmid is Mng. Dir. at TeleCash, 49 (711) 162-6410, FIRST DATA CORP. will acquire TeleCash, a merchant

Telentradobil subscription sign up for the Mobil Handel m-commetre payment system. Morten Gulbaek is EVP at Visa Norge, 47 (\$2) 937-622, morten gulbek@visa no. mest to let all Visa cardholders in Norway with a ISA and TELENOR MOBIL have entered into an agree

44 (1784) 475-006, geent hilbrandie@zaryba.com. Fred Molenaar is Commercial Director at SmartTrust, 31 (75) 640-7215, fred molenoar@smarttrust.com. SATELINDO, a top cellular-phone network in Indonesia, will use mobile payment software from Zaryba and SmartTrust to Indonesia. Geert Hilbrandie is Mng. Dir. at Zaryba, account at Bank Central Asia and Bank International let customers reload minutes billed directly to their bank

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MANAGEMENT CHANGES

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Solutions as SVP, Marketing and Product Mgmt, (703) 322-2440, John skeele®cardsystems.com. Frank Butterworth, farmerly at eCredit.com and Capital One, has for supermarket industry at first Data Merchant Services Valerie Greer has been appointed SVP Bus. Dev., Retail Serv. Bus. at Hausehold. (847) 564-6007, vagreer@hausehold.com. Joseph Venezia has been appointed VP Market Development Rutledge, formerly at TeleCheck, has been appointed CEO EZCheck, (281) 647-6911, randyr@ezchk.com. (513) 218-7443, joseph venezia@firstdata.com. John Skeele formerly at Acumen Solutions, has rejoined CardSystems hief Operating Officer at InterCept Payment Solution 270) 248-9600 x2694, tim barnett@intercept.net Tim Barnett, formerly at Nova, has appointed VP, Business Development at EMCC,
) 829-1800 x3150, floutterworth@emcinc.com. Brian
) 269-1800 y3150, floutterworth@emcinc.com. Brian
) 265-7500 x104, bkett@tritoncanada.com. Randy been appo Solutions

CONFERENCES & SEMINARS

ETA 2003: April 7–10, MGM Grand in Las Vegas. Cost for the four-day conference is \$43.5 for members. Nonmembers pay \$845. Subscribers to The Nilson Report will receive a 20% discount by contacting Karen Hebberger at ETA, (816) 777-0370. k.hebberger@electran.org.

CARDS ASIA 2003: April 23-25, in Suntee City, Strigtopre. Cost for the three-day conference is \$2,225, Subscribers to The Mikes Report will receive a 20% discount by contacting Yee-Lim Tan at Temptinn, (65) 6322-2701, yee

ETTA'S Electronic Benefits Transfer Industry Council's, "Card Technology Forecast: 2004-2009," will be de-6 at the Hilton Crystal City in Arlington, VA. Members pay \$195. Others pay \$325. Register at www.efta.org.

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THE NILSON REPORT

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Group will be held April 10 at the Copley Marriott in Boston. Speakers represent Subscribers to The Nilson Report will receive a 20% discount by contacting Paul Sant at multichannel cross-selling via paper, e-mail, and Web site. Cost of the conference is \$395 suppressing e-statements and paper statements, on-line dispute resolution, e-mail address Livermore Research, (781) 431-1100, paul.sant@livermoreresearch.com. 🛭 line new-account applications, e-mail alerts and confirmations, mobile phone access, and implementations, on-line payment registration, improvements in transaction reporting, on databases, Web site organization and navigation, Verified by Visa and virtual number Citibank, Chase, and Advanta. Topics include: privacy notices and opt-out forms on-line CREDIT CARDS N-LINE 2003 The annual conference of the Livermore Research

usable. Ingrian has more than 50 customers in the U.S. and Europe including government Marketing at Ingrian Networks, Inc. in Redwood City, California, (650) 261-2471, means that if an intruder does get past a firewall, any stolen data will not be readable or Tryptographic data and locks the encryption keys on a separate secure platform. Protecting Web Transactions (from page 1) ... across the Internet to internal databases gencies, financial institutions, and health-care organizations. Franklyn Jones is Head of iside the firewall. Ingrian Networks uses patent-pending technology to secure the

conference is \$945 for members, \$1,095 for nonmembers. Subscribers to The Nilson Report authentication, electronic collection of payments from multiple billing systems, consumer one-time payments through the ACH, identity theft, fundamentals of electronic billing and can register at the member price by contacting NACHA Member reaction to check conversion, and global money transfers. payment, recent developments in electronic payments law, B2B electronic invoicing and reducing ACH credit risk with real-time authonization, growth trends in Web and NACHA Payments (from page 1) ... disbursements, fraud detection and prevention, Services at (703) 561-1100. merchants, new technologies in retailer-based loyalty and payments, on-line opportunities, using biometrics to increase debit card use, fraud protection for on-line purchasing cards in the global supply chain, convergence of ACH/checks/EFT risk and payments, combating money laundering, on-line bill payments and EBPP markets, lelephony payments, marketing direct deposits and direct payments nationally, sending Cost for the four-day

CDs. Siemens. million to acquire the retail and banking systems businesses of specialist Kohlberg Kravis Roberts partnered with GS Capital 49 (5251) 693-5900, javier.lopez-bartoleme@wincor-nixdorf.com. Germany. Wincor-Nixdorf employs 4,600 people in 70 countries Partners, the private equity unit of Goldman Sachs, and paid \$796 action is cancelled. Wincor-Nixdorf ranks third in the world, after Prior issues: 777, 702 88 Javier Lopez-Bartoleme is Executive VP at Wincor Nixdor NCR and Diebold, by shipments of newly manufactured ATMs and imaged, and recorded. Both are returned immediately if the trans-International GmbH in Paderborn, Germany, hen deposited, and then authenticated. Incor Nixdorf (from page 1) ... Currency is verified by denomination The company was formed in 1999 when management buyout Today the company's ATMs/CDs are manufactured in Checks are scanned,

companies and developers may charge fees for applications The source code for Linux is available to anyone, although **Linudix POS Terminals (from page 1)** Operating system.

any language. Both devices come with built-in back-lit display can be delivered with characters in 82 (2) 3482-0991 ext. 215, james@linudix.com. 8 OEM supplier and is looking for partners. James Bong is and earphone jacks. Linudix is interested in being an requirements for encrypted debit transactions. here are PDA-type devices with touch screens. Marketing Manager at Linudix Company, Ltd. in Seoul, Korea, thermal printers, wireless modems, battery packs, They use a 32-bit microprocessor and meet security The LMT-3000 and LMT-3000 Pro shown The

CapitalOne. Not all card spending at merchants is represented here. Additional purchase volume was generated when PINs were used with debit cards issued by Citibank, would not alter these rankings. 🕸 Bank One, Bank of America, JPMorganChase, U.S. Bancorp, and Wells Fargo. That volume Spending (from page 1) ... nonbank issuers — MBNA, Discover, and

currency. currency exchange service provided by Visa and MasterCard, which takes place after a transaction has merchants, and FX risk-management specialists using dynamic currency conversion occurs before the been authorized in the *merchant's* local currency, a based point-of-sale system, or it can be integrated into transaction is authorized in the cardholder's local the platform of a multicurrency processor. installed in a stand-alone POS terminal, ECR, or PCdynamic currency conversion. DCC software can be total revenue over the next five years are acquirers, to \$2.70 billion. Poised to capture 50% or more of that lees passed on to cardholders by another \$2.30 billion ing up the associations' FX service raised the amount of Dynamic Currency Conversion (from page 1) ...mark-(See box to the right.) Unlike the

DCC will be a significant source of future revenue to acquirers worldwide — particularly those in the U.S. Without it, they earned \$3.76 billion from the processcredit and debit card purchase volume in the U.S. last ing of more than \$1.12 trillion worth of Visa/MasterCard another \$400 to \$530 million. That additional revenue year. Dynamic currency conversion would have added

> risk from the foreign exchange. tions to their POS systems will receive between 50 and 125 basis points of the point of sale. Cardholders are then conversion rate is downloaded to the processor's platform. When the currency meni gareway, or integrated into a numbers stored in the terminal, at a pay against a table of bank identification country by comparing the card numbe How it Works. Software recognizes ency up front. Those merchants able to HI CARE ISSUEL. Minety percent of Card the conversion to be applied later by ters choose to pay in their local curbeen established, a foreign exchange n in their native currency or waiting The option of concluding the fram the cost of adding DCL applicanotsimmo e se impome non ncy without any treasur

applied to the \$40 billion in Visa/MasterCard volume generated by international cardholders would come from the acquirer's one-third share of the 3% to 4% currency conversion fees Total FX revenue would have ranged from \$1.20 billion to \$1.60 billion, with the remaining at airlines, cruise lines, car rentals, restaurants, upscale specialty shops, and Web sites. two-thirds going to merchants and FX risk-management specialists. for DCC on chart on page 9.) (turn to page 8) (See FX Managemen

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4.

expect to recover only 1.67% of deals only with the \$15.13 billion exclusively to personal filings. categories, of which only business and personal farmfrom personal bankruptcy filings \$2.84 billion worth of Chapter 13 worth of Chapter 7 filings and the Chapters 7 and 13 apply year. Bankruptcies fall into four last year. Chapters 11 and 12, The recovery model shown here the \$18.19 billion in charge-offs the credit card industry can filings. Over the next five years,

Bankruptcy (from page 1) ... last

debt over a period of three

part of their outstanding

related bankruptcy filings combined cost issuers another \$220 million in charge-offs. CHAPTERS. Under Chapter 13, filers retain

BANKRUHG

All Card Issuers in the U.S.

HOM 13(0)//3/1

from personal bankruptcy filings

\$18.19 MI.

20% Filings to Chapter 13 Filings from Converting Chapter 7 \$757 | \$981 | \$1,362 \$454 \$590 \$817 Son Chapter 7 charge-offs of Š \$303 <u>0</u>00 mount (in millions) \$197 \$272 \$787 \$1.089 \$393 9136.. \$545

© 2003 The Nilson Report, with average 13¢ on the dollar.

115.13 billion in calendar year 2002 let recoveries by Chapter 13 charge-offs dependents including support the debtor and equity in a house. considered necessary to off creditors. Exempt required to give up to five years. property includes assets nonexempt property to Chapter 7, filers are trustees who sell it to pay

dollar value of all bank-7s account for 83% of the RECOVERIES. Chapter

more assets by agreeing to pay creditors all or | unsecured debt, creating an almost total loss ruptcy filings courts wipe off the books or discharge most nothing from them because bankruptcy to creditors? Issuers recover almost Issuers are able to

sell these practically worthless charge-offs at 1¢ per \$100 to errors and fraud in bankrupts petitions, and then pursue that debt in court. firms that specialize in Incding

dollar, but only on the 65% of amount issuers recover from can slightly exceed the net collection efforts. This amount on the dollar (for total Chapter helps creditors. petitioners are known, and the because the whereabouts of all and outside services. This is the same period using in-house nonbankruptcy charge-offs over for in-house and/or outsourced years after deducting overhead Issuers only net an average 13¢ plans that are completed. range from 18¢ to 28¢ on the bankruptcy court workents Chapter 13 filings paid out power of the bankruptcy courts 13 filings) over three to five Gross recoveries from

\$909 mil.
will be managed
In-House netting 124 on the dedian after

23% \$653 mil

32%

Bankruptcy Court Workputs

ed in a Samuel

S5% of Chapter 13 charge offs will be

45% of Chap. 18 | 100% of Chap. 7 charge of is will be | charge of is will be

ald to Purchasers & Brokers

Charge-offs in 2002

\$2.84 bil. ilings werth

Chapter 20 22 by

Hecoveries Estimated

Based on

15.6% were

83.2% were filings worth

\$109.08 mil.

\$91.42 mil

overhead

CONTRICTOR

102.34 mil

\$1.51 mil will be said for the per 3 100

netury 146 on the delar after

will be sold by 5¢ to 13¢ or the datler \$1,278 mil.

\$15.13 68

to issuess

Recoveries will Total on Estimated \$304.25 mil (1.87%) of Charge offs to Personal Bankrupkins

debt can also be sold to purchasers and brokers. Chapter 13 bankruptcy These

> cash up front. collection efforts in order to get immediate Chapter 13 charge-offs at a discount, settling Card issuers are increasingly willing to sell nonbankruptcy debt for which they have to brokers pay more for bankruptcy debt than for a lower return than they would get from handle all of the collection work themselves trustees within five years. Purchasers and buyers are reimbursed by bankruptcy cour

overseeing bankruptcy reform is promising to revive legislation that would help issuers with their Chapter 7 Chapter 13s. Potential revenue gains Chapter 7 filings could be converted to and outsourced collection efforts if more bankruptcy charge offs versus in-house are indicated in the chart shown here. begin to look differently at selling The House Judiciary Subcommittee BANKRUPTCY REPORM. Issuers might

subsidiary Resurgent Capital Services. chases 13s through their wholly owned **8-Line**, which also bought 80% of all Chapter 7s sold in the United States last nation's sixth largest security firm ... purchase and service Chapter 13 bankcollection agencies and law firms pupicies. The three major purchasers of Chapter 13 debt are led by the Max year ... and **Sherman Financial**, which purbecovery subsidiary of Bear Stearns, the INDUSTRY CONTACTS. Over 35

grantors and department stores ... TSYS largest legal collection debt network and which acquired the bankruptcy debtdebt in 1983, and serves major credit stores ... Creditors Bankruptcy Service, in the nation and for large department. vices for most of the top 20 card issuers which manages collections for Max DeMayo in 1999, and owns the nation's management business of Wallace and which pioneered recovery of bankruptcy the largest providers of bankruptcy serprocess both 7s and 13s, and is one of Recovery ... the law firm of *Weinstein freiger & Rilley*, which is used by B-Line to Servicers include Becker & Lee,

software companies. Prior issues: 799, 699, 681, 667, 638, 667, 526, 522, 489, 437 88 over 75% of the nation's debt buyers and case filing updates, providing information to ing provider of bankruptcy notification and acquires bankruptcy debt from regional credit issuers. Dolan Information is the lead-

Management, a privately owned company that chasers and creditors ... and National Capital

Max Recovery/eCast Settlen Dest Burges Gredit Card Bankruptcy Recovery

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those in the travel and entertainment systems in which the card company is both Eventually, however, merchants, particularly negatively affected by DCC at first. American Express, JCB, and Diners Club— Dynamic Currency Conversion (from page the issuer and the acquirer — won't be The closed-loop systems operated by

consider DCC revenue as a segment, can be expected to of T&E expenses. speedier reimbursement currency allow for originated in local demand their share from T&E card issuers. Amex, JCB, and Diners Club entitled, and begin to want to take advantage of business travelers will also right to which they are Transactions

centralized reporting for transactions settlement in a single currency, along with service. Multicurrency processing grew in to U.S. dollar accounts, converted local currency currency conversion had processed in multiple currencies. Currency associations to offer a stable, global FX These excesses led the cardholders very high often charging Caribbean region in the retailers. the mid- to late 1990s in Europe at select tees in the process. 1970s when merchants ts beginnings in the nultinational car rental agencies, hotels, and HISTORY. Dynamic These merchants wanted to receive

Process before the comment for some

Marian Sales Store St. Maria A. S. S. S. Sain Tukal Sec. 19.00

FURIST SE

supplied on the back-end after authorization, by the merchant rather than their card made, but the FX conversions were still wanted to pay with that currency rather than that currency conversion would be supplied holder's currency. Cardholders were notified and in the merchant's rather than the cardthe merchant's. issuing bank, but they were not given an Further adaptations were

CHARTMAN COM Omnibay currency conversion fees. transaction inclusive of exact amount for their

Dynamic currency conversion at holders pay for purchases in the point of sale lets card-

pay inclusive of all currency them exactly what they will their own currency and tells conversion fees.

SUCCESSION OF SU

SANTA GARAGE

GlobalChoice 13. FX vendors suppling dynamic averages 3.5% including issuer currency conversion method currency conversions at the markup. Although few of the and MasterCard The existing Visa

Section Section (SE)

Secreta Servet

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with the same bulk rate discounts the point of sale or Web sites operate base their FX markup on associations receive, most

- Demand settlement systems. More often than by the Visa and MasterCard interbank the rates established daily

they get from the existing association even a slightly better FX price from DCC than disclosure of conversion fees. method. They will certainly get better not, cardholders can expect as good or

merchant's and their local currency, the and DCC receipt totals ... (turn to page 9) exchange rate used, the symbols for both receipt containing amounts in both the call for cardholders to be given a printed govern dynamic currency conversion. Rules establishing operating regulations that been more aggressive than MasterCard about perform DCC without cardholder approval that their choice is final. Merchants can't cardholders are being offered a choice and currencies, as well as text explaining that VISA INTERNATIONAL NEW RULES. VISA has

advising international e-commerce customers

based Web merchants saw the value of merchants absorbed the FX risk. Soon, U.S.-

conversion platforms had to be deployed, and

cardholder's own currency, leading about the price for goods and services in the

Dynamic Currency Conversion/Multicurrency Processi ावु द्यातिकाड

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larakay Makicurrancy and Dynamic Canoncy Conserving Service

Monex (See FX Management) . Planet Payment (See FX Management)

Allied trish Bank (See Acquirers) Khibicumency Flatform (Cards)

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equivalent amount in their own currency then systems. The next step came when cardmulticurrency processors to adapt their

holders who had been informed of a sale's

Dynamic Currency Conversion (from page 9)... must match charges on a cardholder's statement. Substantial fines are in place for violations. Prior issues: 780, 745, 732, 720, 717, 714

ISSUERS/ASSOCIATIONS VS. ACQUIRERS/MERCHANTS. When Visa and MasterCard supply currency conversions, 100% of the FX fee and any markup stays within the bank card industry. Under dynamic currency conversion, acquirers will take one-third of FX-related

the	***	1	from FX provider	
sys	00'66\$	\$2.00	\$101.00 paddus ant from cardioter plus 1% ha	Marchant
E S	\$0.05	\$1.80 1.80% incarduage for to sturr	\$1.85 Interchange fee from exputers	Bank Card Association
flu	\$1.00	21.00 21.00	\$2.00 100 PM	PX Proxider
oft Ch	\$2.15	\$4, 15 1.8% intertungs and assessment here to association plus 2% by to 7X provider	\$6,00 4 0% PX for hom cardholder plus 2% discount from marchent.	Acquiring Rank
공통	\$1.80	\$0.00	\$1.80	Esculing Bank
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as lia me	50.15	. \$1.80 Latercharge for to becare	\$2.85 1.0% In the from issuer plus 1.55% a stestment and interchange fees from the acquains	Sank Card Association
are	\$0.15	\$1.85 16% menchange and a sersment he to ersociation	\$2.00 20% dispurit he from merchani	Acquiring Bank
ha di S	\$4.80	\$1.00 1.0% Di commission to bank card association	\$5.80 40% PX in turn cardholder plus 1 8% traschungs tran acquirer	tsseing Bank
7 %	NETTED	73.00	COLLECTED	
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3 8	ersion	IS/NEULV	sank Caro Currency conversion	Sank G
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revenue, but two-thirds will leave the bank erchant to the issuing bank. e imposing cuts in interchange fees, and rd industry and be split between the FXive to do something. Loss of revenue sessment fees, and issuers could nversion supplier and the merchant. As bility for Internet transactions from the members in all countries prepare to shif om DCC comes just as several countries d not supply an FX service. Issuers will rcharge international transactions at uld make up some of that loss by raising ns will lose revenue. esult, both card issuers and the associa-C-enabled merchants even though they The associations

DCC is good for all merchants serving international cardholders, but U.S. merchants stand to gain the most since the American business travel and entertainment market is the largest in the world. However, U.S. merchants also face the most challenges, this due to the fact that they have more outlets and that those outlets often cross time zones. FX rates can fluctuate hourly.

spent tens of millions of dollars to develop the systems needed for DCC because they see the huge profit potential. Those systems perform the following functions: they switch transactions in real time ... identify international transactions before the forcing systems.

the authorization request was made.... manage the foreign exchange rate tables ... match up charge back and retrieval requests ... print all FX conversion data on a receipt ... provide funding to the merchant ... or reports to acquirers so that they can fund merchants ... reconciliation and reporting for all FX transactions ... and manage the FX exposure for all transactions by tying the authorization amount to the clearing file.

February 28, 2003

David Robertson, Publisher